# Integrating Water Management in California

Water Plan Update 2013

Delta Conservancy Board Briefing March 27, 2013

# California Water Plan Highlights

INTEGRATED WATER MANAGEMENT





Update 2009 · Department of Water Resources

## The California Water Plan

- > First published in 1957 as Bulletin 3
- ➤ Updated 9 times as Bulletin 160
  → Update 2009 released Mar 2010
- Water Code requires DWR to update Water Plan every 5 years
   → next one in 2013
- Growing interest by Legislature & stakeholders
- No mandates & No appropriation

# California Water Plan Highlights

INTEGRATED WATER MANAGEMENT



Update 2009 · Department of Water Resource

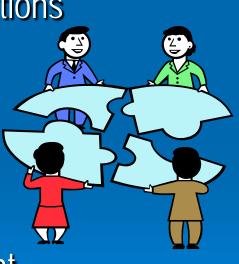
# Water Plan Process Evolution 2000 - 2013

- Broad critique of Update 1998
- New approach
  - Open & transparent public process
  - Collaborative recommendations
  - A strategic plan
- > New process tools for:
  - Improving communication
  - Improving access
  - Improving collaboration

  - Improving agency alignment
     Tracking progress / metrics











# Update 2009 – State's Blueprint Integrated Water Management & Sustainability

#### VISION

- Public Health, Safety, Quality of Life
- Vitality, Productivity, Economic Growth
- Healthy Ecosystem, Cultural Heritage

Foundational Actions for

# SUSTAINABLE WATER USES

- Use Water Efficiently
- Protect Water Quality
- Expand Environmental Stewardship

Initiatives for

# RELIABLE WATER SUPPLIES

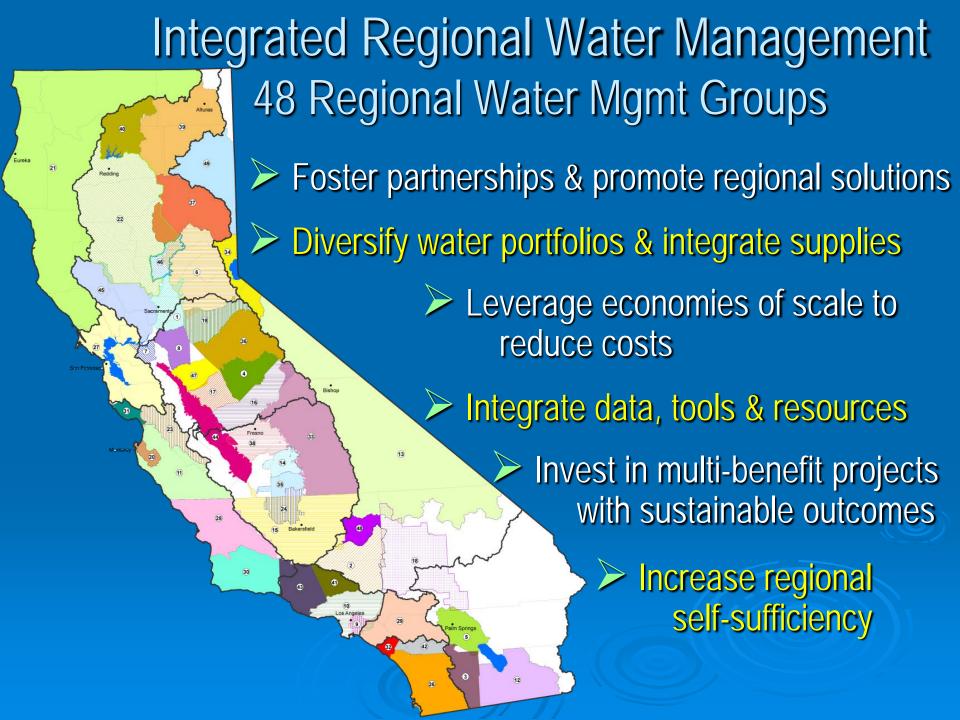
- Expand Integrated Regional Water Managment
- Improve Statewide Water and Flood Management Systems

# 3 I's - Invest in Innovation & Infrastructure

California State Government in partnership with others should invest in water innovation & infrastructure to support integrated water management and sustainable outcomes

- Innovation actions
  - Governance improvements
  - Planning & public engagement improvements
  - Agency alignment (data, plans, policies & regulations)
  - Information technology (data & tools)
  - Water technology / R&D
- Infrastructure improvements-- natural (green) & human (grey)
  - Regional projects
  - Inter-regional projects
  - Statewide systems
- State Investments Finance Plan
  - Stable funding for innovation actions & statewide systems
  - Seed money to incentivize regional infrastructure improvements

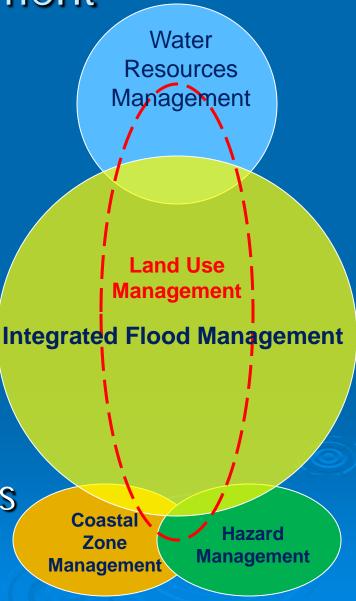




Integrated Flood Management

Comprehensive approach to flood management

- Considers land & water resources at watershed scale
- Minimizes loss of life and property damage from flooding
- Maximizes benefits of floodplains
- Recognizes benefits to ecosystems from periodic floods



# Improving Coordination Land Use Planning & Water Management

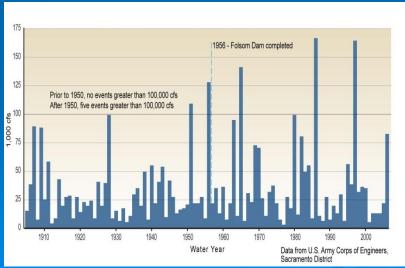


- Land use planning controlled locally
- Water management decentralized -over 2,300 counties, cities, public agencies, and private water companies
- IRWM coordinates land use planning with water supply, quality, flood management, and climate adaptation
- State Government provides technical assistance and financial incentives
- More coordination among State agencies & with IRWM Partnerships

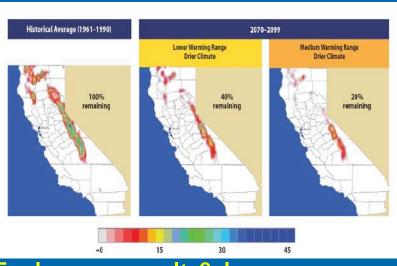
### Climate Change: Future Hydrology Unlike the Past



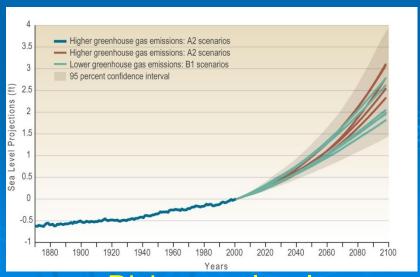
Higher air & water temperature



Changing runoff pattern



Early snowmelt & less snowpack



Rising sea level

# 27+ 3 New Resource Management Strategies A Range of Choices

#### **Reduce Water Demand**

- Agricultural Water Use Efficiency
- Urban Water Use Efficiency

# Improve Operational Efficiency & Transfers

- Conveyance Delta
- Conveyance Regional / Local
- System Reoperation
- Water Transfers

#### **Increase Water Supply**

- Conjunctive Management & Groundwater
- Desalination –Brackish Water & Seawater
- Precipitation Enhancement
- Municipal Recycled Water
- Surface Storage CALFED
- Surface Storage Regional / Local

#### **Improve Flood Management**

Flood Management

#### **Improve Water Quality**

- Drinking Water Treatment & Distribution
- Groundwater / Aquifer Remediation
- Matching Water Quality to Use
- Pollution Prevention
- > Salt & Salinity Management
- Urban Stormwater Runoff Management

#### **Practice Resource Stewardship**

- > Agricultural Land Stewardship
- Economic Incentives (Loans, Grants & Water Pricing)
- Ecosystem Restoration
- Forest Management
- Land Use Planning & Management
- Recharge Area Protection
- Water-Dependent Recreation
- Watershed Management

New – Education & Outreach Sediment Management Water & Culture

# We are working on Update 2013





# California Water Plan Update 2013

California Water Plan Update 2013 (Update 2013) is currently being developed by staff from the Department of Water Resources (DWR) and other agencies through rigorous public involvement and State and federal agency coordination processes. It will build on the contents of the previous update — the five-volume California Water Plan Update 2009, which provided a strategic plan, a suite of resource management strategies, reports on California's hydrologic regions, and reference and technical guides — and will introduce a number of key additions and enhancements in response to stakeholder recommendations and evolving decision-maker information needs.

Integrated water management is a collection of policies, practices, and tools applied to water resources planning and management to achieve multiple objectives and enhanced outcomes.

#### Water Plan Framework for Integrated Water Management and Sustainability

#### VISION

- · Public Health, Safety, Quality of Life
- · Vitality, Productivity, Economic Growth
- · Healthy Ecosystem, Cultural Heritage

Foundational Actions for

#### SUSTAINABLE WATER USES

- Use Water Efficiently
- · Protect Water Quality
- · Expand Environmental Stewardship

Initiatives for

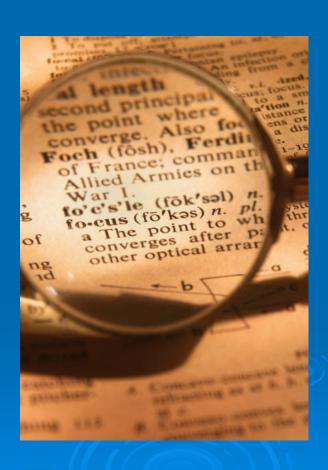
#### RELIABLE WATER SUPPLIES

- Expand Integrated Regional Water Managment
- Improve Statewide Water and Flood Management Systems

Investing in Innovation and Infrastructure

# Update 2013 Topic Caucuses & Focus Areas

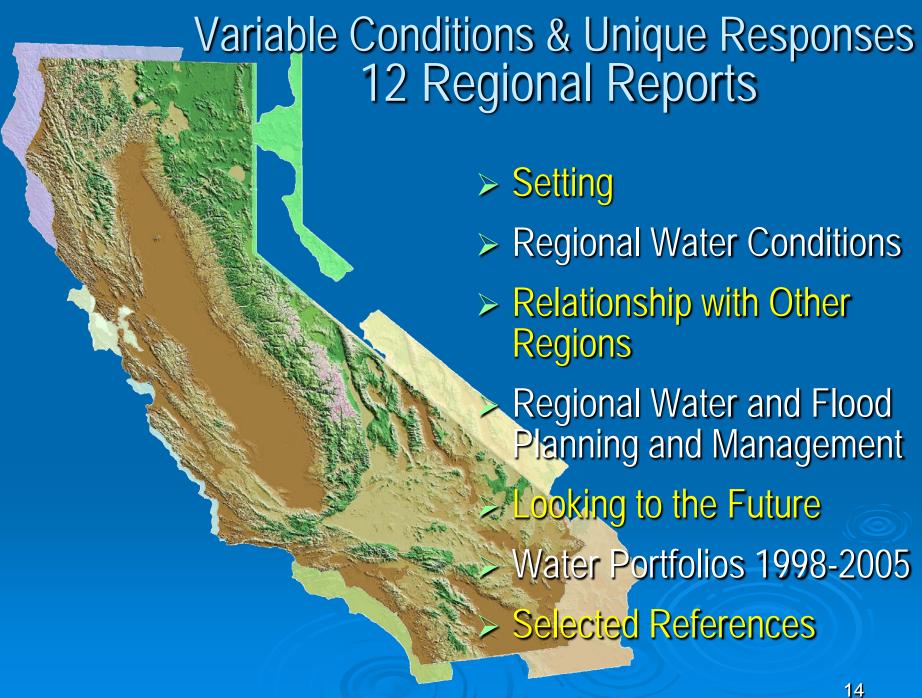
- > Finance Plan
- Groundwater
- Water Quality
- Integrated Flood Management
- Water Technology / R&D
- DAC / Environmental Justice
- Sustainability Indicators
- Scenarios Planning for Future Uncertainty



## Update 2013 Companion Plans (Partial List)

- California's Flood Future Report
- Central Valley Flood Protection Plan
- Alluvial Fan Task Force Report
- California Emergency Plan (Cal-EMA)
- Threat Identification and Risk Assessment (Cal-EMA)
- Strategic Plan for Future of IRWM
- Delta Stewardship Council Delta Plan
- Bay Delta Conservation Plan
- Water Commission Strategic Plan
- > Plus 30 other plans ...





# Update 2013 Scoping & Deliverables

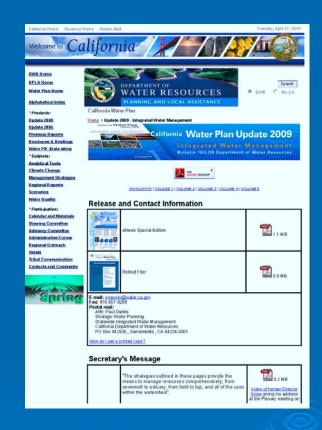


## Ways to Access Water Plan Information

Visit the Water Plan Web Portal www.waterplan.water.ca.gov







Subscribe to Water Plan eNews a weekly electronic newsletter www.waterplan.water.ca.gov/enews

# Questions & Comments





#### Kamyar Guivetchi, PE

Statewide Integrated Water Mgmt CA Department Water Resources

(916) 653-3937 Kamyar.Guivetchi@water.ca.gov